FIG. 1

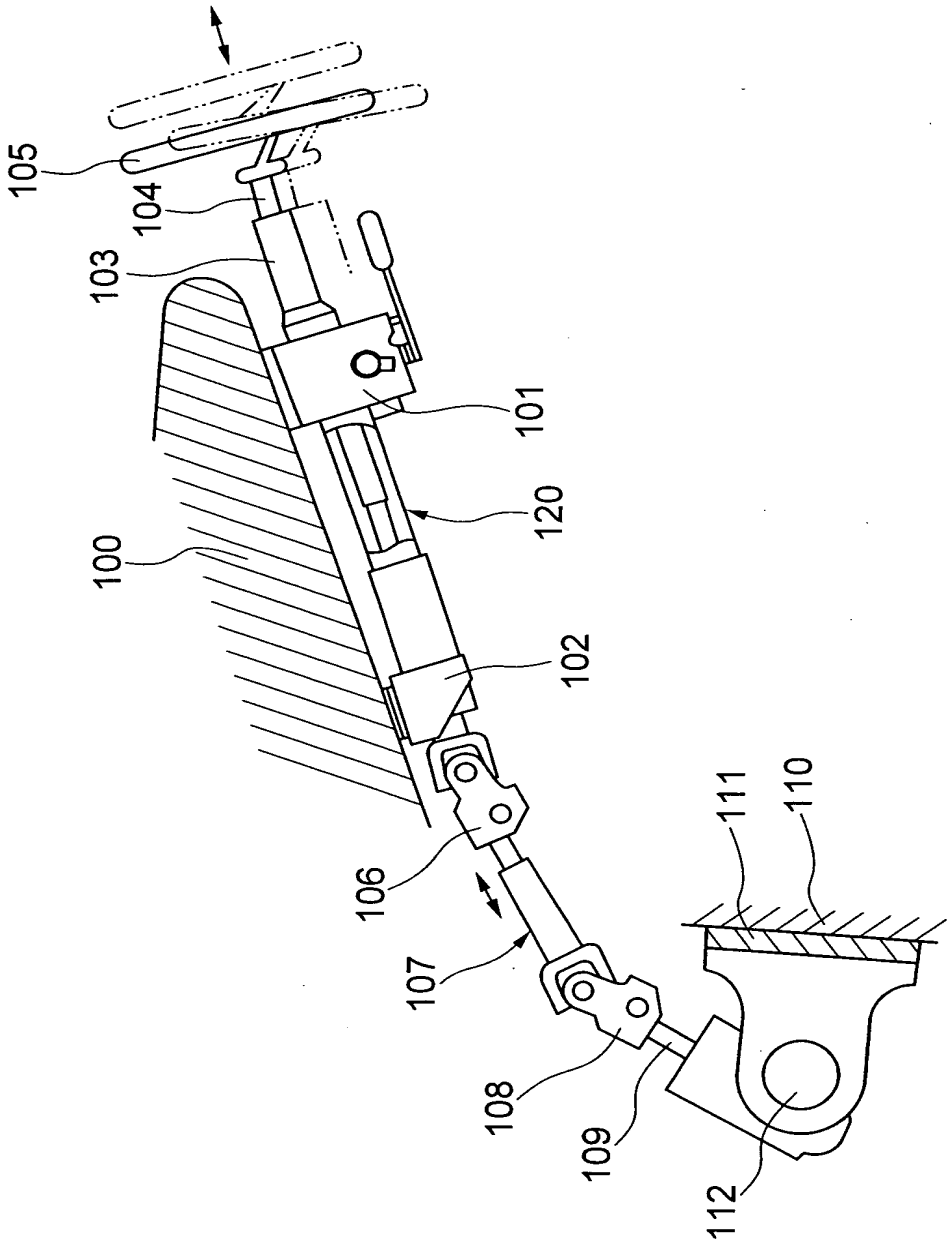

FIG. 2

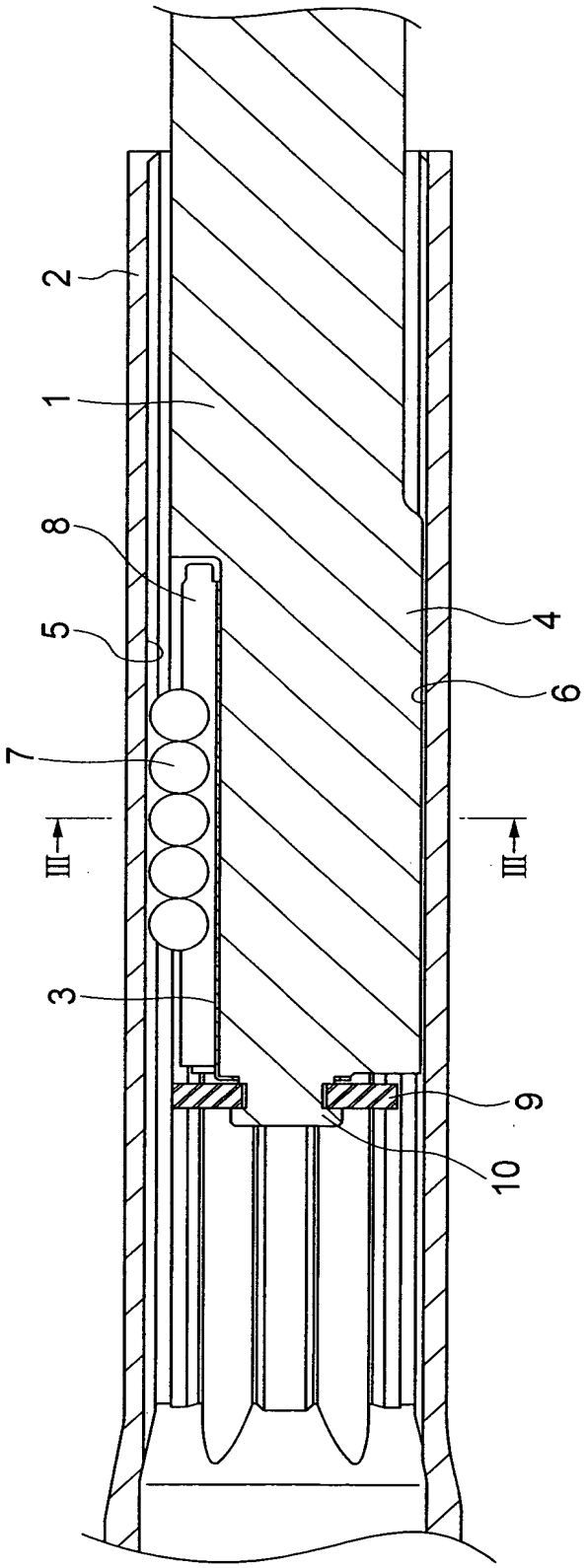

FIG. 3

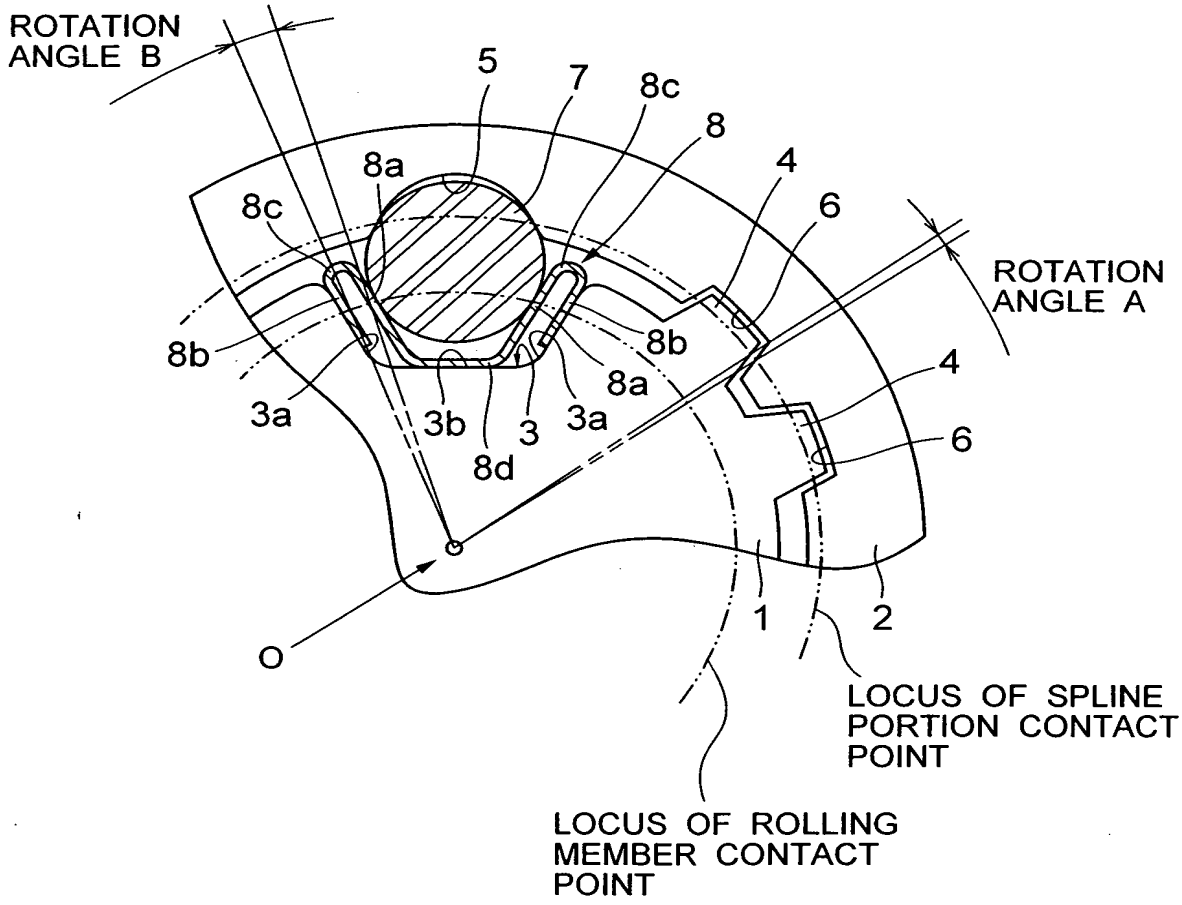
ROTATION ANGLE B
5
7
8c
8
4
6
8a
8c
ROTATION ANGLE A
8b
8b
4
8a
3a
3b
3
3a
6
8d
O
1
2
LOCUS OF SPLINE PORTION CONTACT POINT
LOCUS OF ROLLING MEMBER CONTACT POINT

FIG. 4

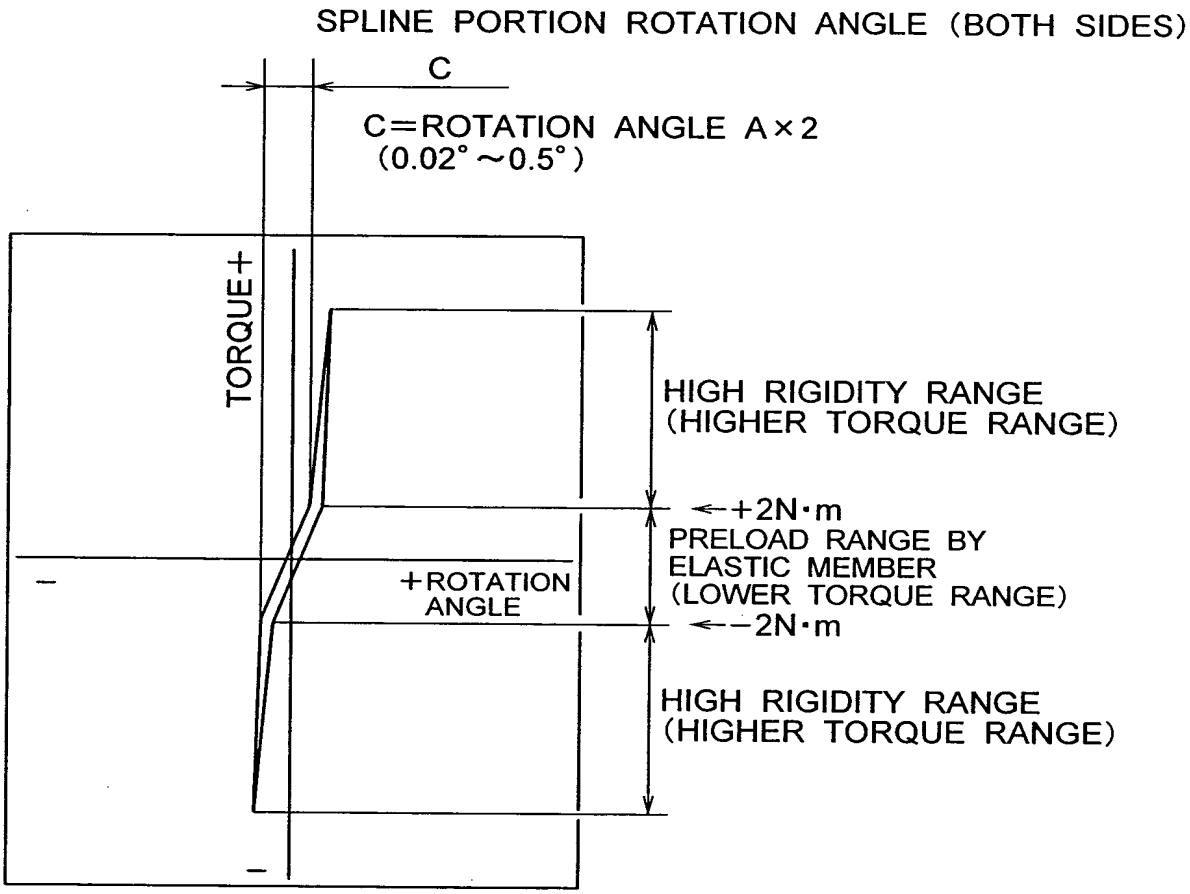
SPLINE PORTION ROTATION ANGLE (BOTH SIDES)
C
C=ROTATION ANGLE A×2
(0.02°～0.5°)
TORQUE+
HIGH RIGIDITY RANGE
(HIGHER TORQUE RANGE)
←+2N·m
PRELOAD RANGE BY
ELASTIC MEMBER
(LOWER TORQUE RANGE)
←−2N·m
HIGH RIGIDITY RANGE
(HIGHER TORQUE RANGE)
−
+ROTATION
ANGLE
−

FIG. 5A

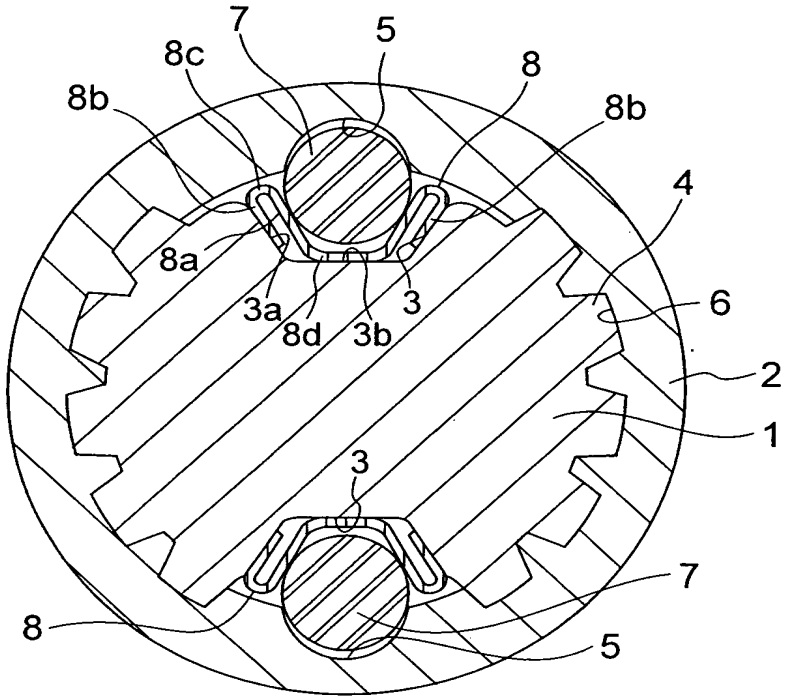
7
5
8c
8
8b
8b
4
8a
6
3a
8d
3b
3
2
1
3
7
8
5

FIG. 5B

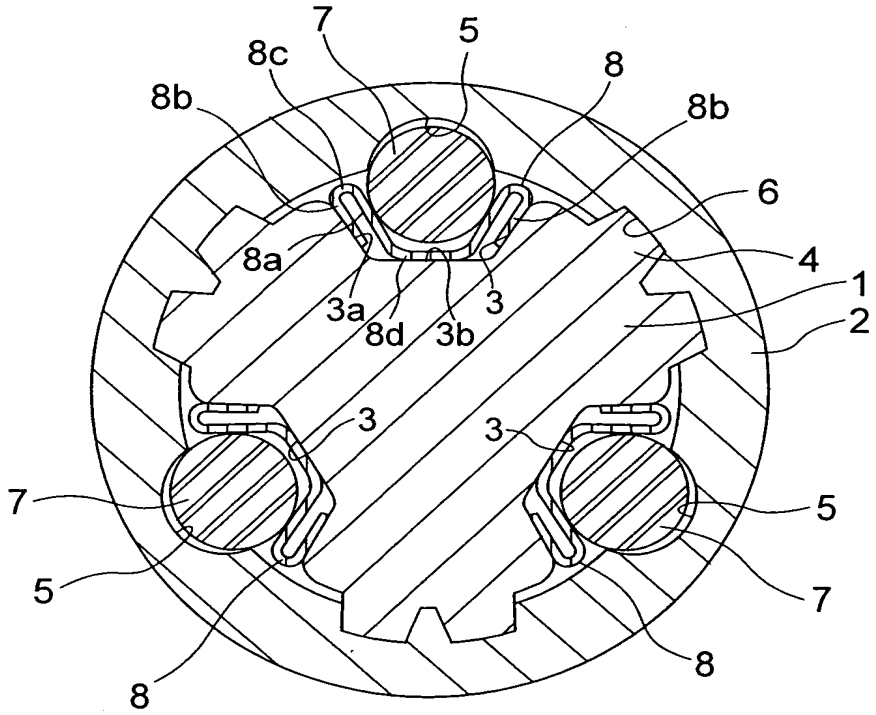
7
5
8c
8
8b
8b
6
8a
4
1
3a
8d
3b
3
2
3
3
7
5
5
7
8
8

FIG. 6A

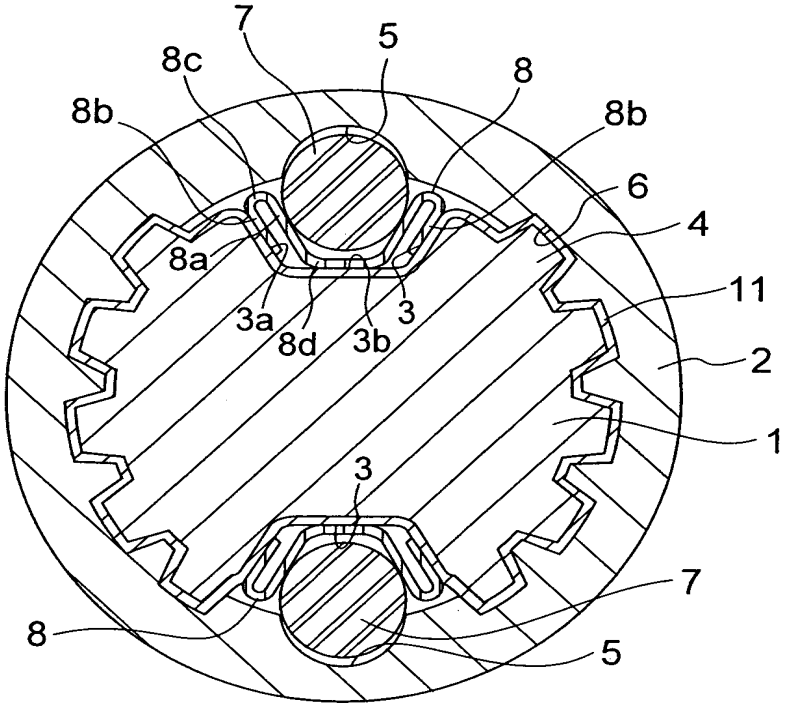
7
5
8c
8
8b
8b
6
4
8a
11
3a
8d
3b
3
2
1
3
7
8
5

FIG. 6B

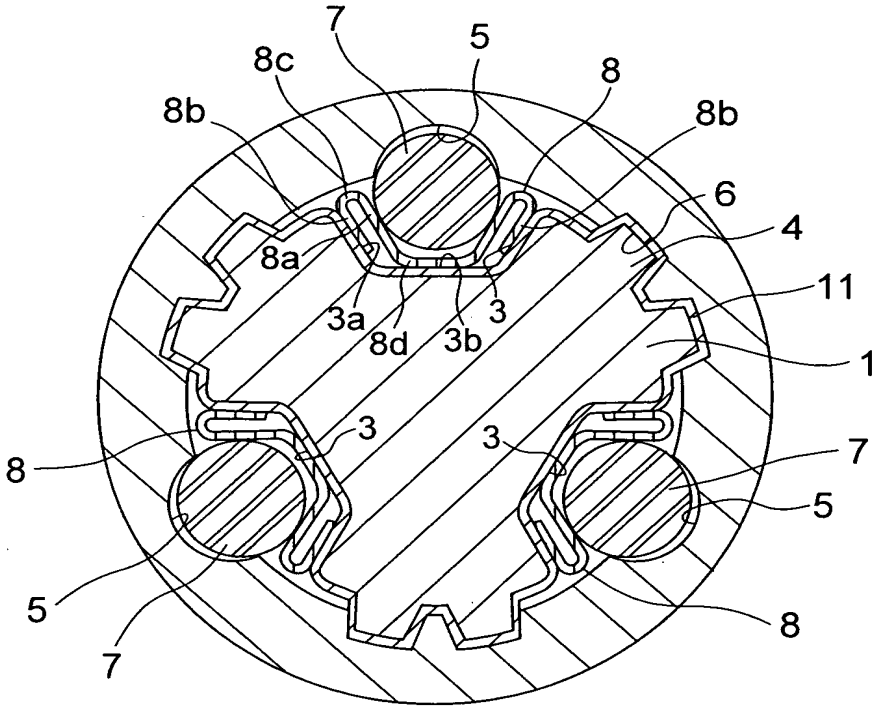
7
5
8c
8
8b
8b
6
4
8a
11
3a
8d
3b
3
1
3
3
7
8
5
5
7
8

FIG. 7A

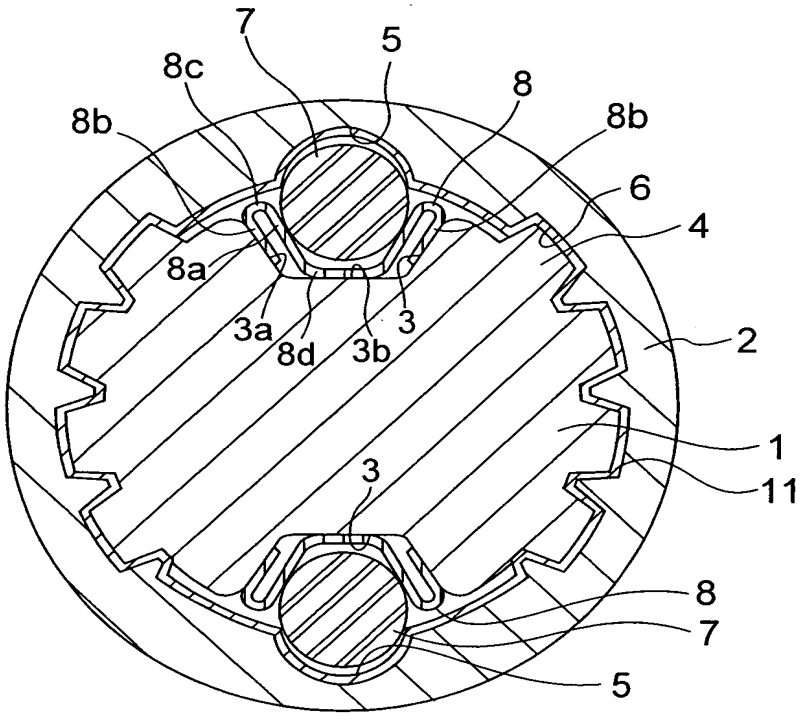
7
5
8c
8
8b
8b
6
4
8a
3a
8d
3b
3
2
1
11
3
8
7
5

FIG. 7B

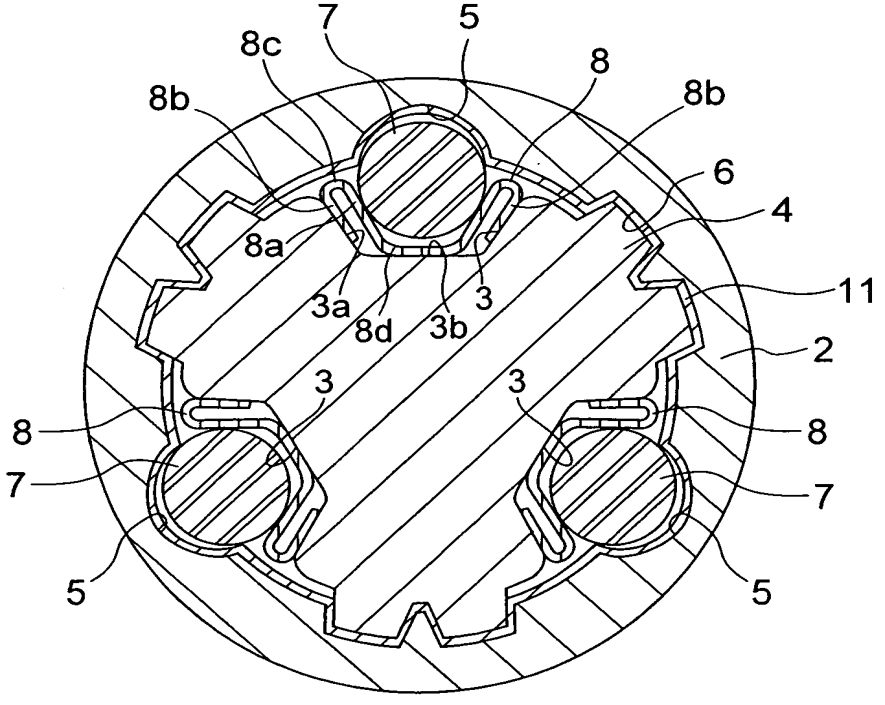
7
5
8c
8
8b
8b
6
4
8a
3a
8d
3b
3
11
2
3
3
8
8
7
7
5
5

FIG. 8

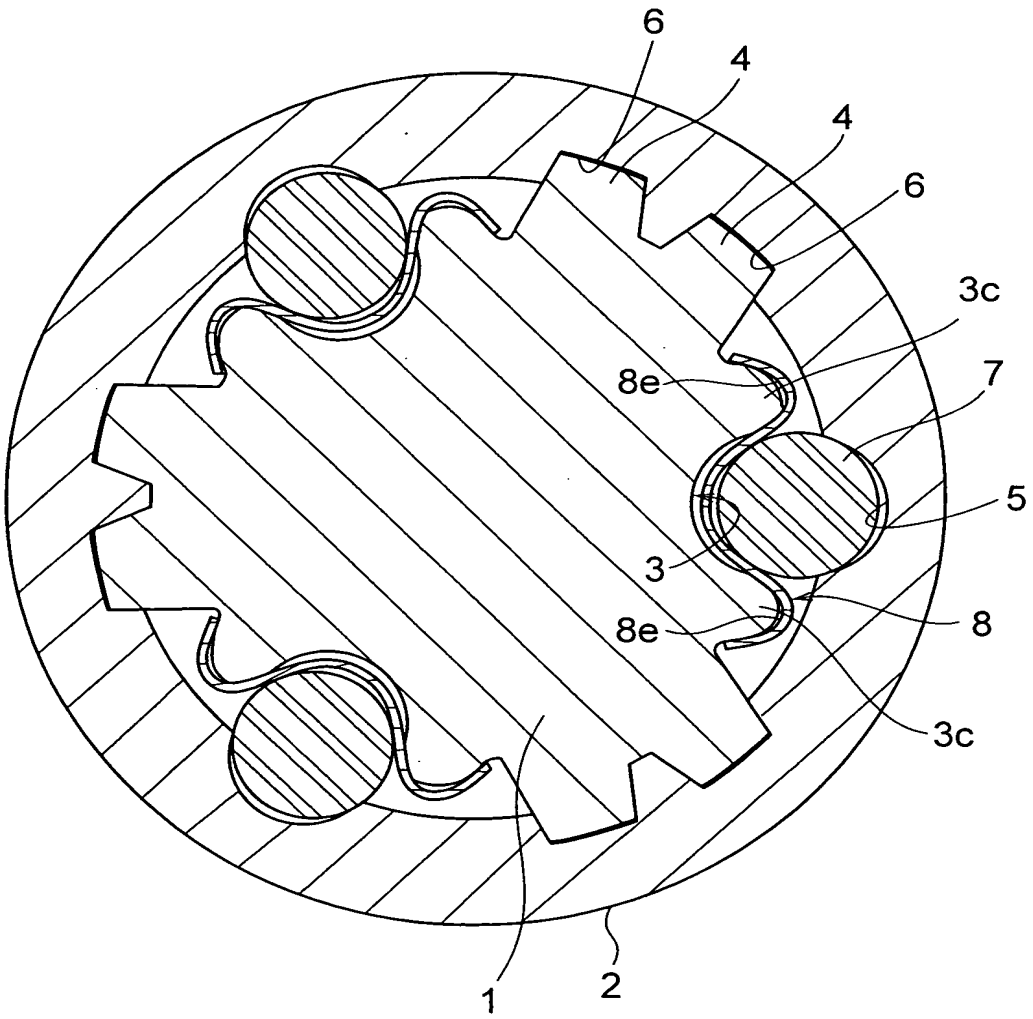

FIG. 9

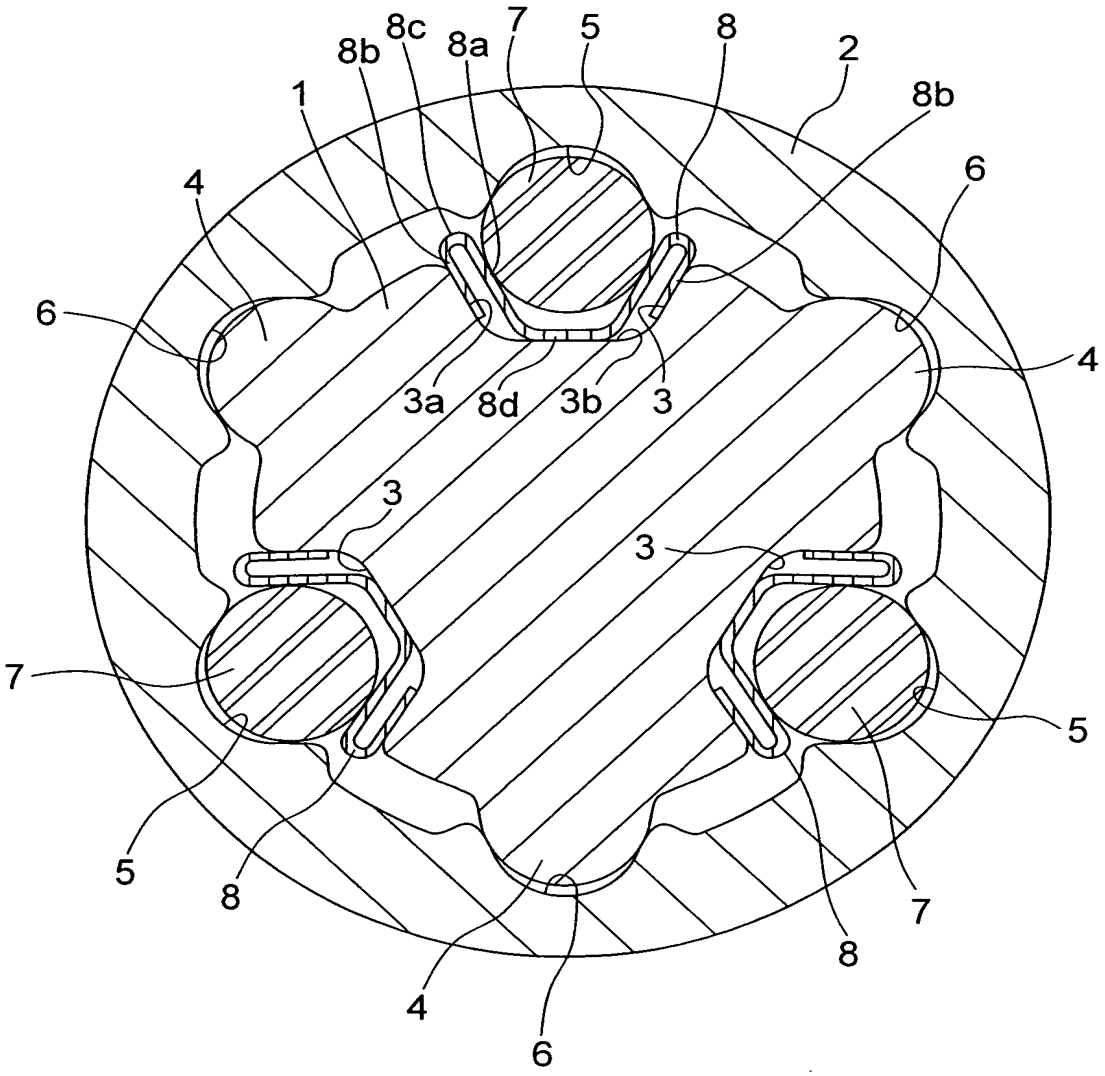

FIG. 10

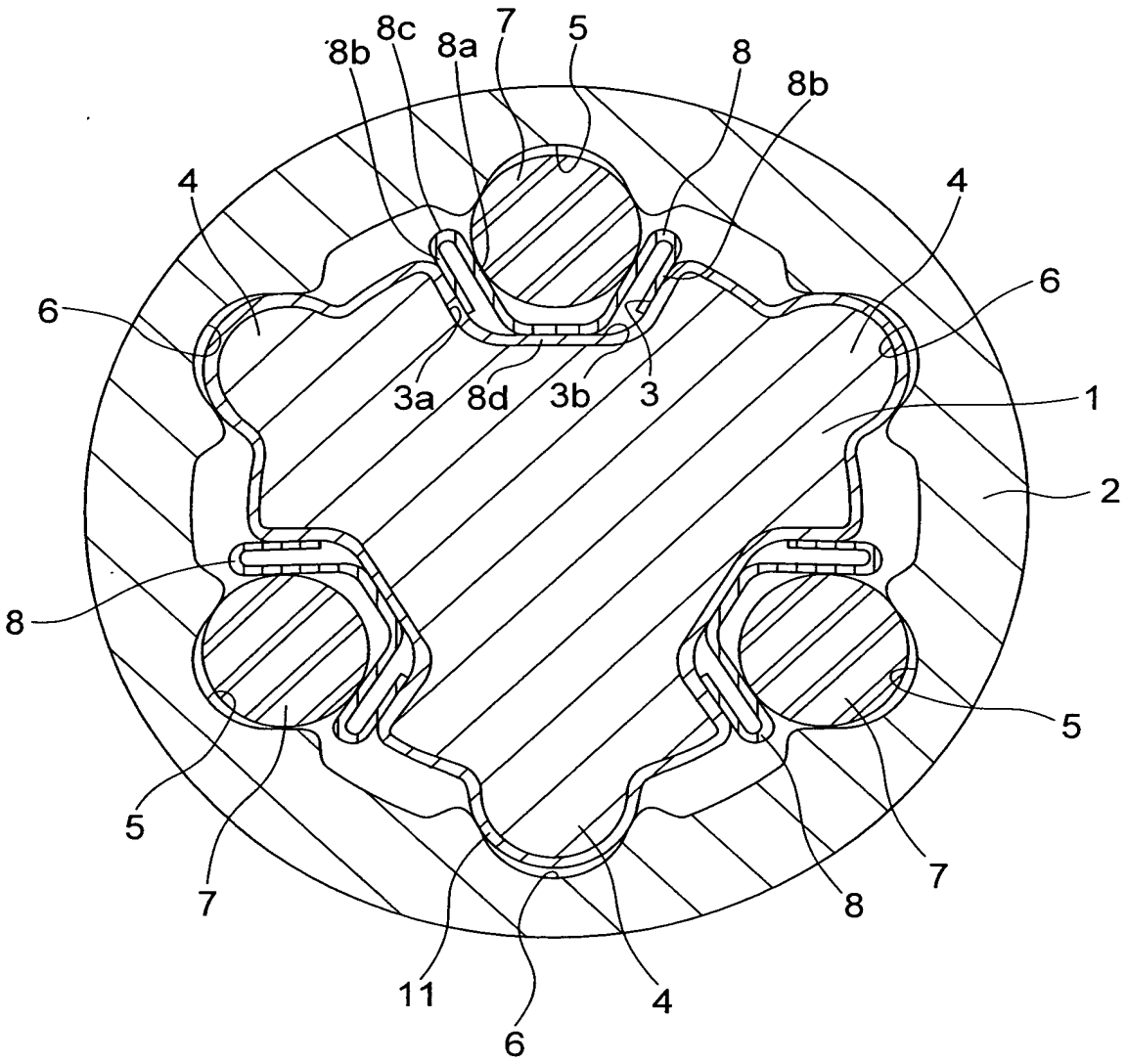

FIG. 11

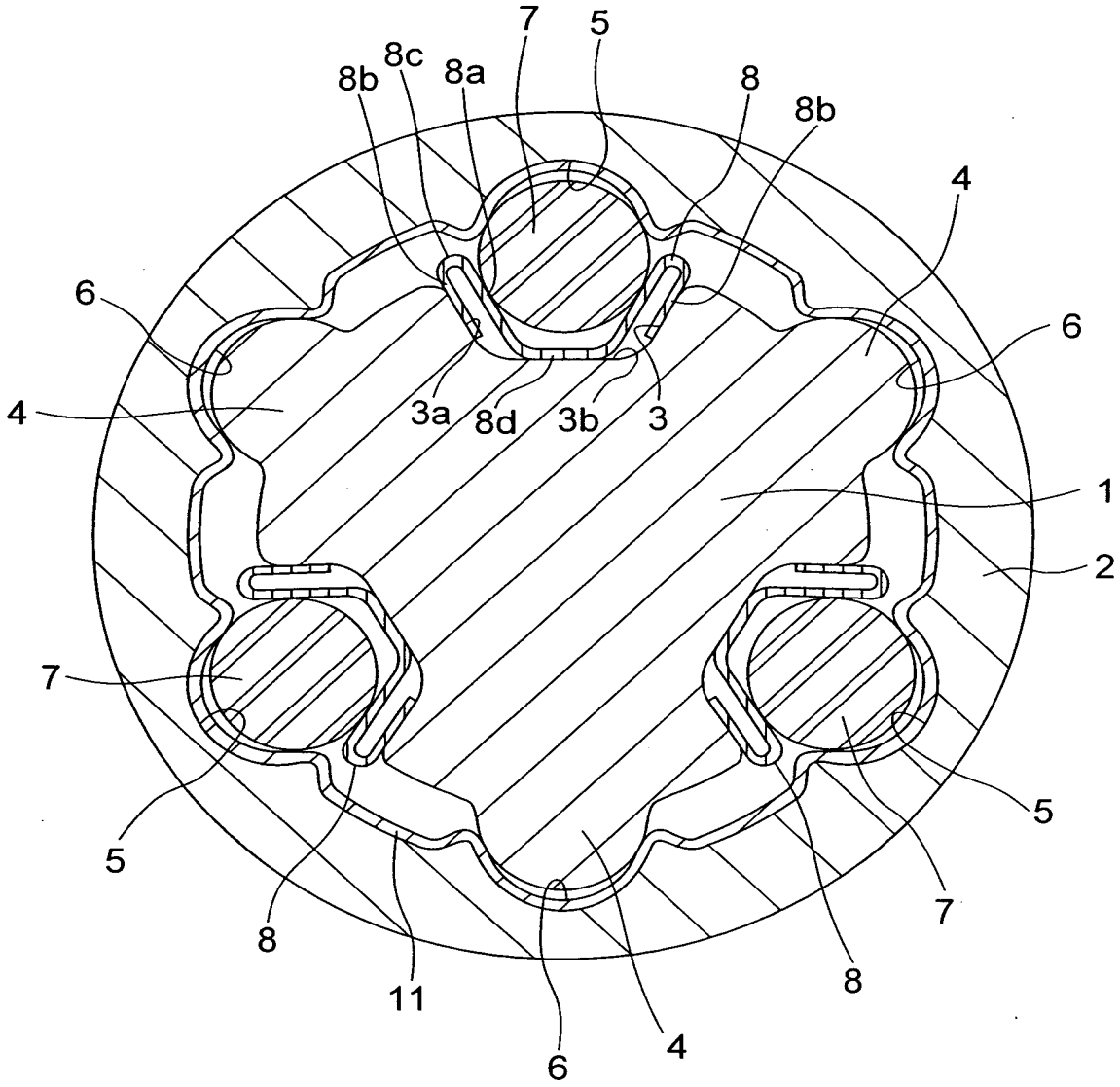

FIG. 12A

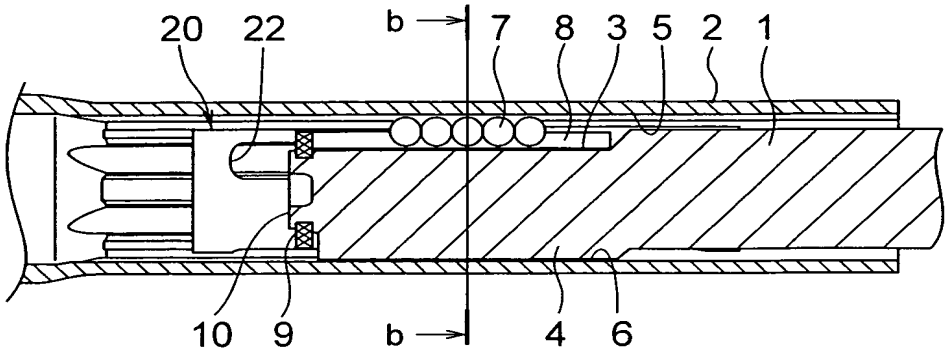
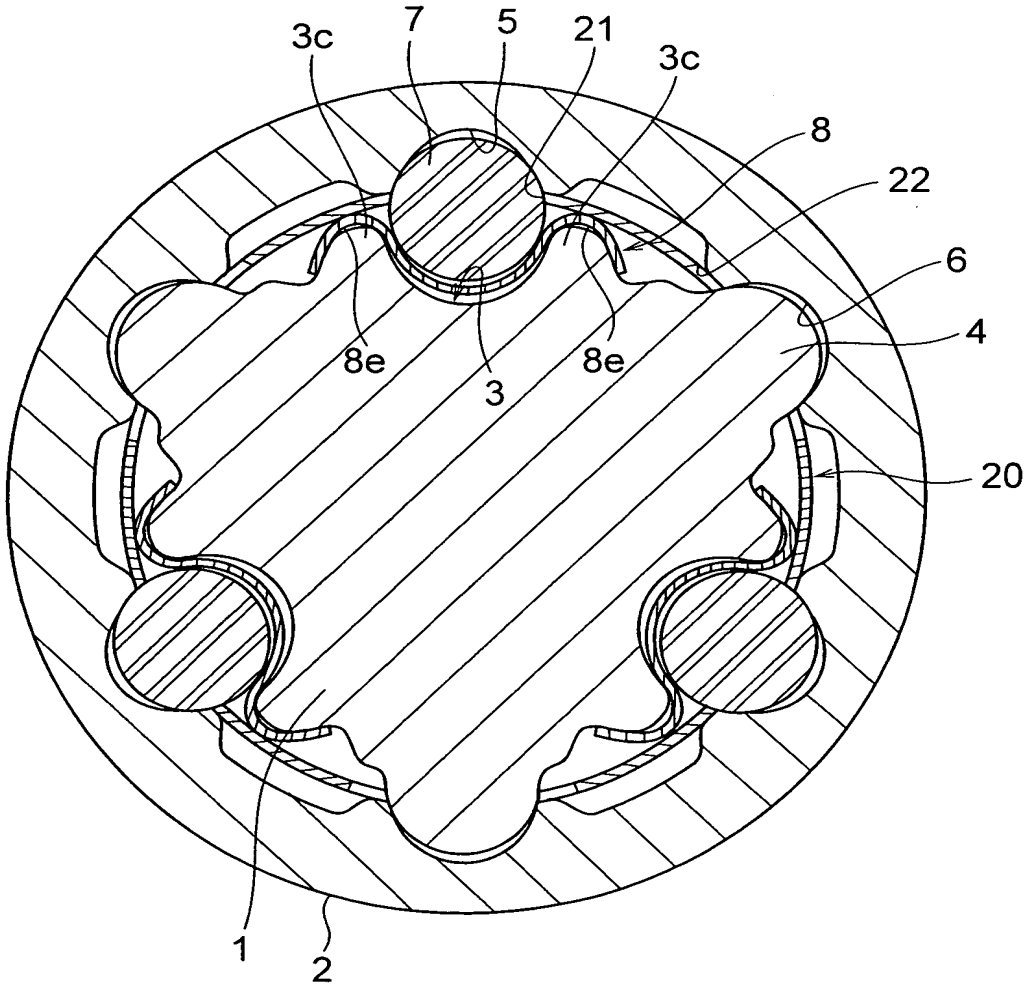
FIG. 12B